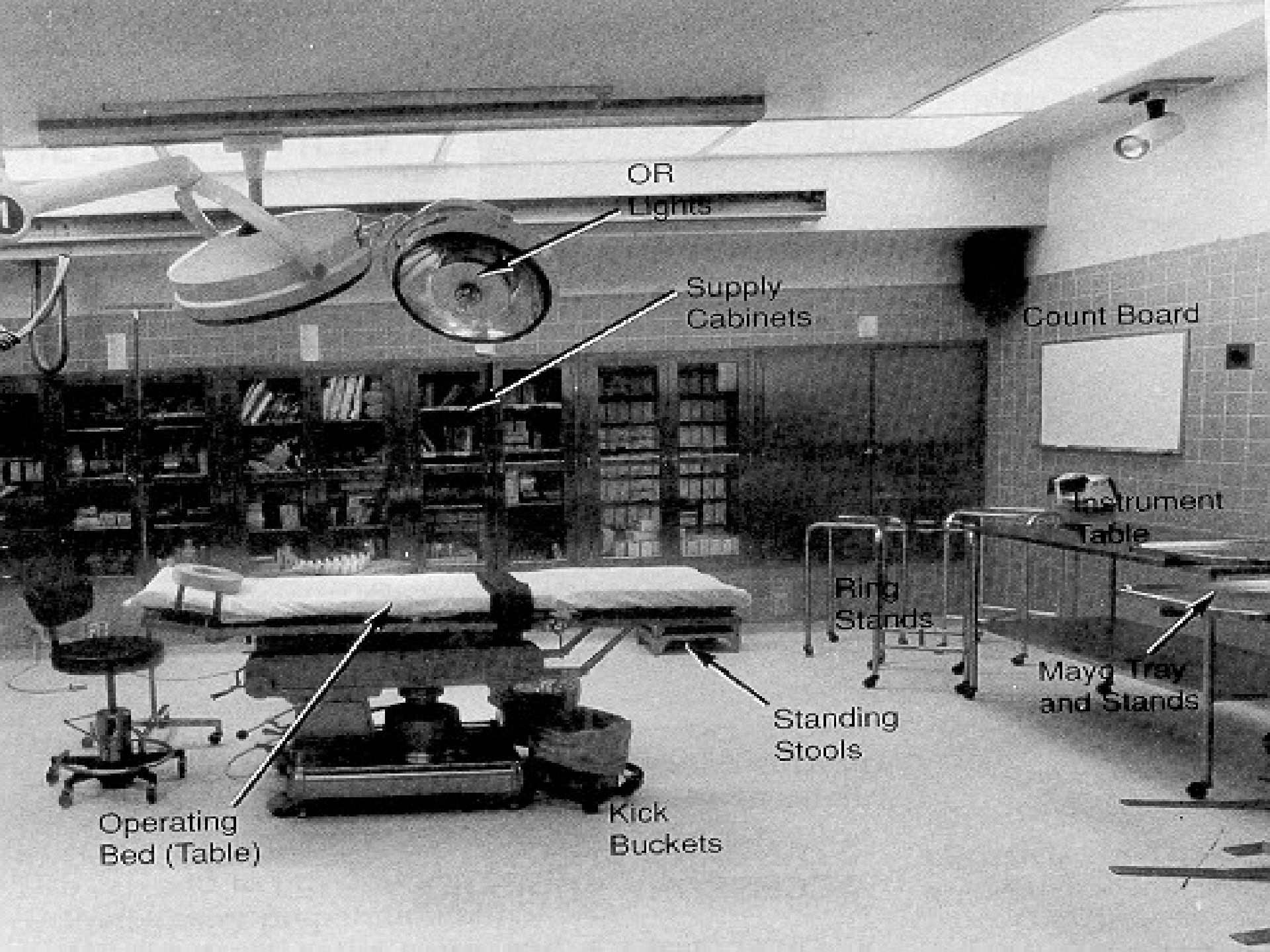
Standard Precautions

Opportunityisnowhere

Terminal Learning Objective

Given the appropriate information, identify the principles and practices of standard precautions IAW cited references.


OR Lights
Supply Cabinets
Count Board
Instrument Table
Ring Stands
Mayo Tray and Stands
Standing Stools
Operating Bed (Table)
Kick Buckets

Enabling Learning Objectives

- List 4 major exposure risks in the operating room.
- List the characteristics of HIV, HBV and HCV.
- Identify the characteristics of standard precautions and transmission-based precautions.

Exposure Risks in the OR

- Contact with open surgical sites
- Sharps manipulation
- Mucous membrane exposure
- Cutaneous (skin) exposure

Characteristics of HIV, HBV and HCV

Human Immunodeficiency Virus (HIV)

- Found in blood, body fluids that contain blood and WBCs
- Can occur by percutaneous or permucosal exposure.

Questions

What is the definition of “percutaneous” and permucosal”?

Why should all patient be considered potentially infectious?

Human Immunodeficiency Virus (HIV)

- Affects immune system
- Risk of getting HIV is small, but does exist

Hepatitis B Virus

- Is more easily transmitted than HIV
- Transmitted percutaneously or permucosally by exposure to blood and other body fluids from an infected person.
- Leads to chronic hepatitis, cirrhosis or liver cancer.
- 10,000-18,000 healthcare workers get HBV at work. 200-300 of them will die each year

Hepatitis B (HBV)

- Transmitted like HIV
- Risk of transmission is 27-43%!!!
- Vaccine can help prevent infection
- 6 week incubation period
- Post-exposure treatment available

Hepatitis C (HCV)

- Affects the liver
- Percutaneous exposure
- No vaccine
- 60-70% have no symptoms
- 40% of liver disease is HCV related
- NO post-exposure treatment

Standard Precautions

- Combines UP and BSI
- Used for ALL patients
- Applied to:
  - Blood
  - Body fluids, secretions, excretions (except sweat), regardless of visible blood.
  - Nonintact skin & mucous membranes

Transmission-based Precautions

- Documented/suspected transmissible infections
- Additional precautions beyond SP.
- 3 types
  - Airborne
  - Droplet
  - Contact

Questions

What is the difference between Universal Precautions and Standard Precautions?

What can be done to protect yourself against potential exposure to pathogens?

Enabling Learning Objectives

- Identify general procedures to follow after an exposure to bloodborne pathogens.
- Identify general guidelines for use of standard precautions.
- Select requirements for the Occupational and Health Administration's Rule for Occupational Exposure to Bloodborne pathogens.

General procedures to follow after an exposure to bloodborne pathogens.

Exposure to Blood

- Wash needlesticks/cuts with soap/water
- Splashes to nose, mouth or skin flushed with water
- Irrigate eyes with water/saline
- Report exposures

Post-exposure Prophylaxis

- Most exposures don’t result in infection
- Risk varies; depends upon:
  - Pathogen and type of exposure
  - Amount of blood & amount of virus

Post-exposure Prophylaxis

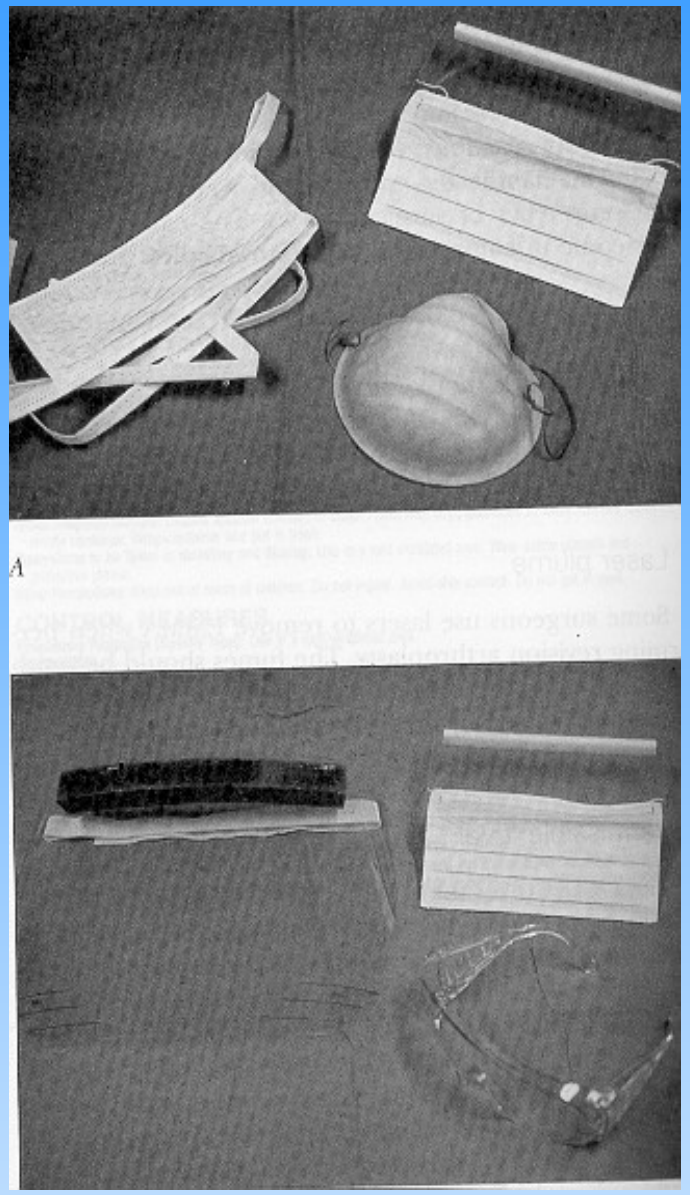
- Risk varies; depends upon: (Cont.)
  - Immune status of worker
  - Severity of exposure
  - Availability of post-exposure treatment.

DIDN'T WASH
HANDS
MEN

Guidelines for use of Standard Precautions

- HANDWASHING!!!!
- Wear gloves when appropriate
- Appropriate protection/gowns
- Handle sharps carefully
- Single-use/reusable items
- Handling of linen
- Environment

1



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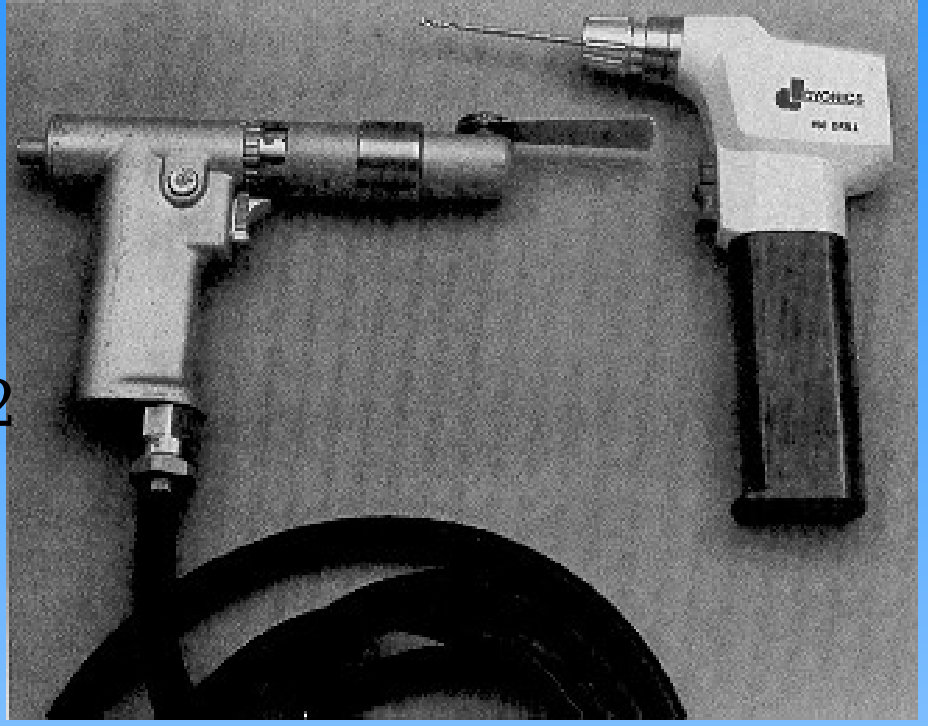

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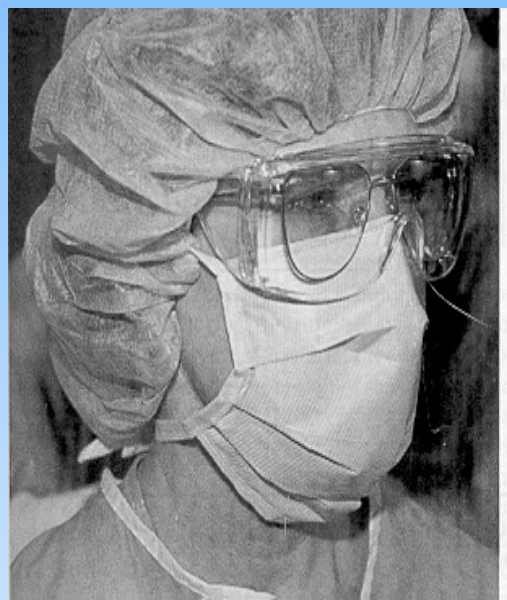

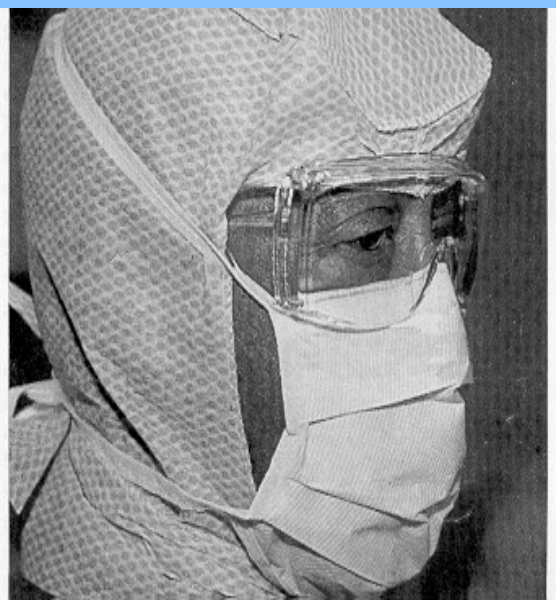

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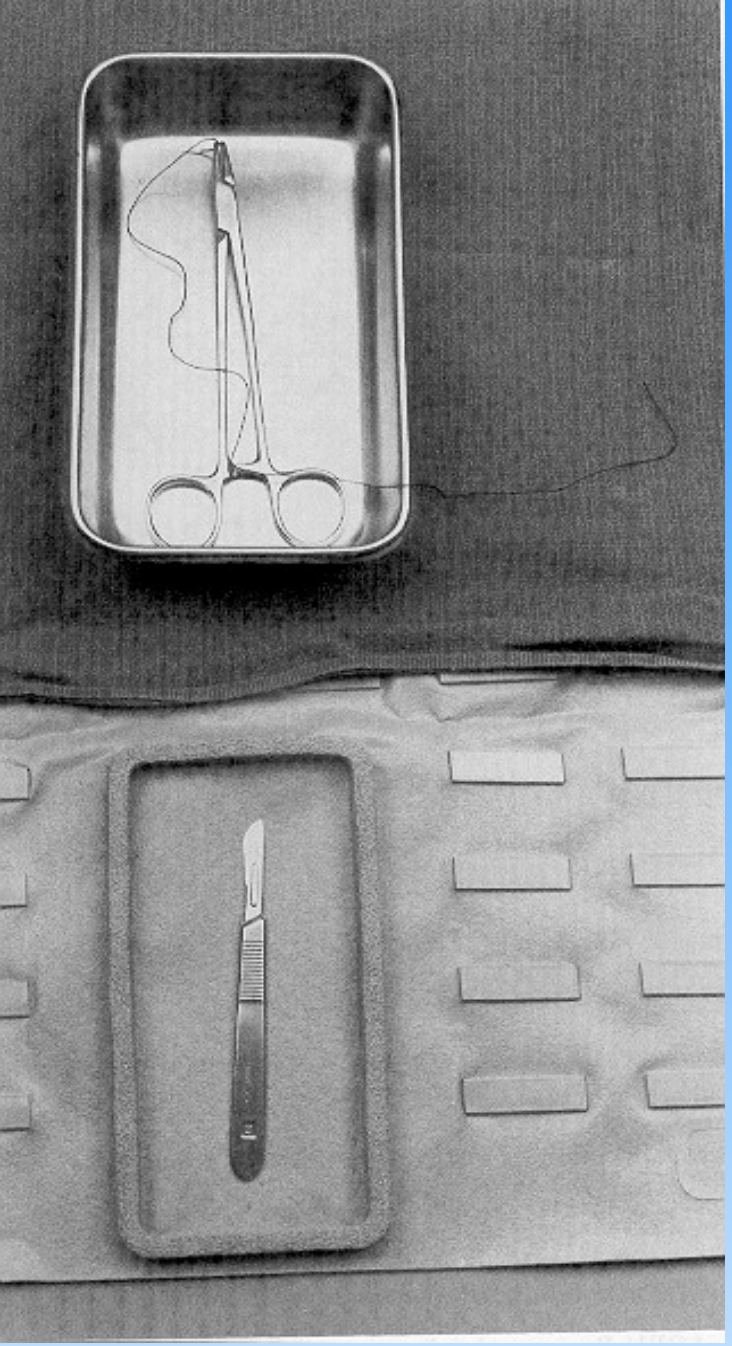
Bloodborne Pathogens Rule

- Exposure control plan
- Engineering & work practice controls
- No-touch, hands-free technique

Bloodborne Pathogens Rule

- Loaded needle holders
- Contaminated items
- Contaminated waste
- No eating, drinking; no open wounds



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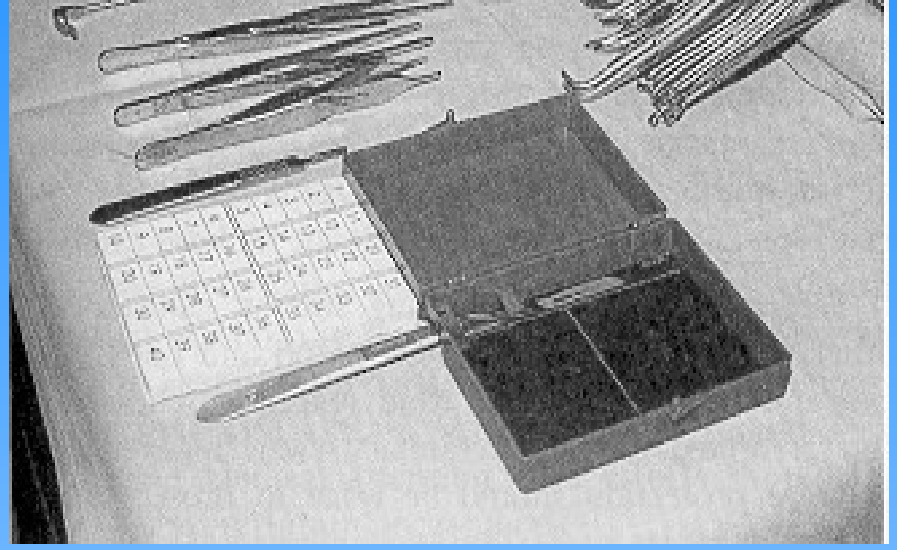

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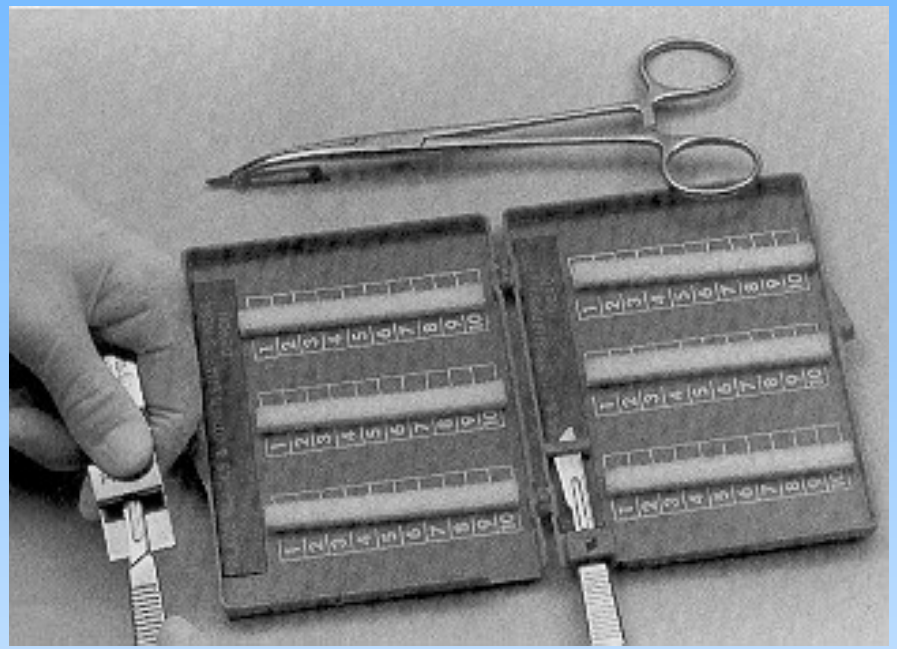

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Visual
Sponge Counting
System
Sharps
Waste
Instrument
Table
Kick bucket

Enabling Learning Objectives

- Select the differences between infection and active disease.
- Select the guidelines applicable for the care of the patients with tuberculosis.
- Select the guidelines for the care of patients with a positive diagnosis of MRSA and VRE.

Differences between Tuberculosis (TB) Infection and Disease

TB Infection and Disease

- Infectious disease
- Spread by airborne route; 2 stages
- Infection
  - Normal chest X-ray, negative smears
  - No pulmonary symptoms; not infectious

TB Infection and Disease

- Disease
  - Abnormal chest X-ray; positive smears
  - Pulmonary symptoms; can infect others

Care of TB Patient

- Postpone elective surgery
- Do surgery at end of day
- Patient must wear OR mask
- OR personnel wear N-95 mask
- Patients directly to OR suite
- Room traffic to a minimum
- Post-op in NEGATIVE pressure room

Questions

What kind of pressure is found in an operating room suite?

Why should a TB patient be placed in a room with negative pressure?

Care of the patients with a positive diagnosis of MRSA and VRE

Methicillin Resistant Staphylococcus Aureus

- What is MRSA?
- Care of MRSA patients
  - Strict handwashing
  - Gown/gloves worn by nonscrubbed

Methicillin Resistant Staphylococcus Aureus

- Care of MRSA patients (Cont)
  - Patient directly to OR suite
  - Unneeded supplies; low traffic
  - One terminal cleaning before room reuse
  - Change scrubs

Vancomycin Resistant Enterococcus (VRE)

- What is VRE?
- Care of the VRE Patient in the OR

Jeopardy Game:

- 4 Categories.
- Class leader pick the first category.
- 1st student to raise hand will be given the opportunity to phrase the answer in the form of a question.
- Each correct answer receives a piece of candy.

Jeopardy Game:

Categories:

Acronyms

The things we do for work

Quit bugging me

Blood isn’t just for vampires!

Summary

- Exposure risks in the operating room.
- Characteristics of HIV, HBV, and HCV.
- Standard and transmission-based precautions.

Summary

- General procedures to follow after an exposure.
- General guidelines for use standard precautions.
- Requirements for OSHA’s Bloodborne pathogens Rule.

Summary

- Tuberculosis - differences between infection and disease.
- Care of patient with tuberculosis.
- Guidelines for care of the patient with a positive diagnosis of MRSA and/or VRE.

Questions????

BIOHAZARD